Mimulus Memo

California Native Plant Society
KERN CHAPTER

MARCH 2024

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EVENTS

MARCH

2 – Field Trip: Sand Ridge
21 – Meeting 6:00 – 8:30 pm
PROGRAM: Randall Preserve
30 – Field Trip: Short Canyon

APRIL

6 – Field Trip: Carrizo Plain
10 – Field Trip: Portal Ridge Preserve
13 – Field Trip: Mill Creek
18 – Meeting 6:00 – 8:30 pm
PROGRAM: Sand Ridge
20 – Field Trip Tweedy Canyon

MAY

4 – Field Trip: Canebrake Ecological Reserve *(tentative)*
16 – Meeting 6:00 – 8:30 pm
PROGRAM: TBA

JUNE

7 — 9 – CNPS Chapter Council Meeting, Kernville
7 – Field Trips out of Kernville:
Old State Road
Chimney Peak Road
9 – Field Trips out of Kernville:
Saddle Springs Road
Shirley Meadows

Winter Solstice Surprise: Wildflowers in Bloom at Red Rock Canyon!

by Nancy Nies

WHEN WE PLANNED A HIKE WITH FRIENDS IN **RED ROCK Canyon State Park** on December 21, 2023,we expected to see spectacular scenery, including the striking rock formations and panoramic views for which this special place is known. What we had not expected to see, as we headed to the south of the Red Cliffs parking area and then east toward **Nightmare Gulch**, was a somewhat altered, though still dramatic, landscape. We were to learn that the tropical storm in August 2023 had closed trails in the park and washed out large segments of the road we had taken on previous excursions.

Photos by Nancy Nies unless otherwise noted.

FAMILY: **Four o'clock** (*Nyctaginaceae*); SPECIES: **Mojave sand-verbena** (*Abronia pagonantha*)**.**

Little did we suspect that the world's changing climate, bringing warmer-than-usual fall temperatures and more rain, had prepared yet another surprise for us on this Winter Solstice — more than a dozen species of native wildflowers in bloom! Here are some of them, grouped by plant family, in ascending order of the number of plants we saw in each of four families, along with one or two interesting facts about each plant. One species, two species, three species, four . . .

FAMILY: **Phlox** (*Polemoniaceae*); SPECIES: **desert calico** (*Loeseliastrum matthewsii*)**.**

ONE . . . The **four o'clock family** (*Nyctaginaceae*) was represented by just one of the species we saw — *Abronia pogonantha* (**Mojave sand-verbena**) — which normally blooms from April to July. We also discovered one species of the **phlox family** (*Polemoniaceae*) — *Loeseliastrum matthewsii* (**desert calico**) — whose usual bloom period is May to July.

FAMILY: **waterleaf** (*Hydrophyllaceae*); SPECIES: **phacelia** (*Phacelia* sp.).

FAMILY: **evening primrose** (*Onagraceae*); SPECIES: **brown-eyed primrose** (*Chylismia claviformis*).

TWO . . . As we hiked, we spotted two different *Phacelia* sp. (**phacelias**) of the **waterleaf family** (*Hydrophyllaceae*). We actually saw only one plant of each, one flowering in purple and the other in lavender. Their normal bloom season is similar to those of other phacelias — from March through April or May.

FAMILY: **evening primrose** (*Onagraceae*); SPECIES: **large white evening primrose** (*Oenothera cespitosa*).

THREE . . . We also came upon three species of the **evening primrose family** (*Onagraceae*). *Chylismia claviformis* (**brown-eyed primrose**), which ordinarily blooms from February through May, is one of the most common California desert wildflowers. On this December hike, there were numerous brown-eyed primrose plants, with many buds just starting to open. We noticed a few *Oenothera cespitosa* (**large white evening primrose**) in flower, though their official bloom time is usually June through September. Much more abundant was *Oenothera primiveris* (**yellow desert evening primrose**), whose normal bloom time is March through May. Its bright-yellow flowers, blooming individually or in clumps, were particularly eye-catching on that gray winter day.

FAMILY: **evening primrose** (*Onagraceae*); SPECIES: **yellow desert evening primrose** (*Oenothera primiveris*).

FOUR . . . Of the dozen or so species of flowering plants we saw on our hike, four belonged to the **sunflower family** (*Asteraceae*). Each is unusual in its own way. *Anisocoma acaulis* (**scale bud**), is the lone species of its genus. *Eriophyllum wallaceii* (**Wallace's woolly daisy**) was the only plant we saw whose normal eight-month-long bloom time actually begins in December. *Chaenactis fremontii* (**Fremont's pincushion**) has disk flowers but no ray flowers. The fourth and most abundant "daisy" we saw that day was, ironically, a very rare endemic listed as threatened — *Dainandra arida* (**Red Rock tarplant**), which usually blooms from April through November. This tarplant grows only in the vicinity of Red Rock Canyon, where it is known from only ten sites. We saw large yellow patches of it along the trail leading directly east, uphill, from the Red Cliffs parking area.

FAMILY: **sunflower** (*Asteraceae*); SPECIES: **Wallace's woolly daisy** (*Eriophyllum wallaceii*).

On the shortest day of 2023, the dark clouds of climate change revealed a bit of silver lining in the form of colorful wildflowers, most of them blooming three to five months ahead of the start of their usual bloom times. This discovery was an exciting and enjoyable surprise. However, the question now: What with the continued rain and warm weather we've had since December, how many wildflowers can we expect to see blooming this spring and summer in Red Rock Canyon . . . and elsewhere? Time will tell. ✿

Thank You

... to everyone who stepped forward to facilitate the chapter's re-organization — **Melanie Bliss, Bill Nelson, Lucy Clark, Paul Gipe, Rich Spjut, Sabrina Mehtabuddin.** ✿

Chapter Meetings

upcoming TOPICS

Thursday, March 21, 2024 - 7pm
Presenter: Maria Veteri,
The Nature Conservancy
Topic: The Randall Preserve

Thursday, April 18, 2024 - 7pm
Presenter: Greg Warrick,
The Center for Natural Lands Management
Topic: Sand Ridge

All in-person chapter meetings are held the **3rd Thursday** of each month.

Place: Most 3rd Thursday meetings will be held in the Larry E Reider Bldg., 2000 K St. **Park in the parking stucture east of the building and enter from doors on that side**. Front doors lock at 5 pm. Check for signs indicating in which room meeting will be.

Meeting times: 6 –8:30 pm:
6 pm - Socializing, plant ID and gardening discussion groups; bring snacks
7 pm - Program presentation and a short business meeting. Ideas for speakers are welcome. Contact **Paul Gipe** (*pgipe@igc.org).* ✿

The rare **Red Rock tarplant** *(Dainandra arida)* blooming abundantly at its namesake park, 21 December 2023.

Field trip in May of 2022 to Tomo-Kahni State Historic Park near Tehachapi**.** Tomo-Kahni means "Winter Village" and was the site of the seasonal home of the Kawaiisu who inhabited the area for two to three thousand years..

Botanical Field Trips

by Paul Gipe

KERN CNPS FIELD TRIPS ARE OPEN TO ALL. We welcome you to join us to see and learn about our native plants and their habitats, to learn to identify plants, or to photograph them. If you are skilled in plant identification, you can help us all learn.

These field trips include short hikes at a "botanical pace", as we stop to identify wildflowers along the trail. All participants are ,required by CNPS to sign a release of liability waiver.

We try to schedule field trips several weeks in advance. However, because wildflower blooms vary from one year to the next, we may reschedule or cancel a field trip on short notice.

Field trips are often scheduled on a weekend, but we do schedule trips during the week, especially if there's a dramatic bloom occurring.

We post the field trip schedule in the *Mimulus Memo*, on our website, and in our Kern CNPS Event email.

(**Note**: If you opted not to receive email when you joined CNPS, you will not receive an email from us. **You must "opt-in" to get our email**.) The schedule will only describe the general location of the field trip. The exact location of where to meet will be provided by the trip leaders.

Please dress in layers, wear boots or shoes you can hike in and bring food and water. You may also want to bring a hat, sunscreen, binoculars, cameras, plant list and useful references such as **Kern County Flora** and the **Jepson Manual**. We recommend wearing long pants and long-sleeved shirts.

EXPECTATIONS

Participation is by reservation only so we know whom to expect, and how many will be attending each field trip.

Please email Paul Gipe at least two days before the field trip and indicate the names of those who will attend and their mobile phone number.

Please note that if you or your party can't attend, it is critical for safety and planning purposes that you call or email the contact person and **let them know you will not be there.** Someone else may want to take your place.

All participants are required by CNPS to sign a release of liability waiver.

If you decide to leave a field trip early, please notify the trip leader so we can check you out.

We will provide more details on the location, where we will meet, and what to expect on the field trip to the participants a few days before the field trip.

Everyone is responsible for their own safety. Pay attention and watch for traffic if the field trip is near a roadway.

Liliac fairy lantern (*Calochortus amoenas*) on a field trip in the Sequoia National Forest in 2013.

Spring-Summer 2024 Schedule

March 2	**Sand Ridge** (Bakersfield)
March 30	**Short Canyon** (Brady's) with **Rich Spjut**
April 6	**Carrizo Plain National Monument** with **Megan Means**
April 10	**Portal Ridge Preserve** (Antelope Valley)
April 13	**Mill Creek, Sequoia National Forest**
April 20	**Tweedy Canyon** (Keene) **The Nature Conservancy** with **Andrew Clare**
May 4	(*Tentative*) **Canebrake Ecological Reserve** (Onyx)/ **Audubon** Fay Ranch Rd. (Weldon)
June 7	**Chapter Council Meeting Trips:** **Old State Road** *(TBD)* **Chimney Peak Road** with **Rich Spjut**
9 June	**Chapter Council Meeting Trips:** **Saddle Springs Road** **Shirley Meadows** (Greenhorn Mtns.)

Previous Field Trip Locations

Atwell Island
Bittercreek NWR
CALM
Carrizo Plain NM
Fort Tejon
Hart Park & Lake Ming
Horse Meadow Campout
Hungry Valley SVRA
Kelso Valley
Kern Canyon Trail
Kern Natl. Wildlife Refuge
Lockwood Valley
Kelso Valley
Kern Canyon Trail
Kern Natl. Wildlife Refuge
Lockwood Valley
Mill Creek
Mt Pinos
Old State Road
Piute Mountain
Pixley Vernal Pools
Rancheria Rd
Red Rock Canyon State Park
Salt Creek (BLM)
San Joaquin River Gorge
Sand Ridge
Semitropic Ridge
Shell Creek Road (SLO)
Short Canyon
Squirrel Meadow
Sunday Peak Meadow
Toll House Ranch TNC
Tomo Kahni State Historic Park
Tule Elk Preserve
Western Mojave Desert
Wind Wolves ✿

Ephedra foliata, image from Wikimedia Commons, reported of a plant cultivated at the UC Davis Arboretum, identified *Ephedra sp.*

Chapter Botanist's Message: How did the Old World *Ephedra foliata* ("shrubby horsetail") Show Up in Kern County?

by Richard Spjut

IN THE JANUARY 2024 ISSUE OF THE *MIMULUS MEMO* (MM Jan 2024), I reported on the discovery of a non-native *Ephedra* found in **Erskine Creek,** commonly known as **shrubby horsetail**, *E. foliata*. The species is native to semi-arid regions of northern Africa to India, occurring on sandy to rocky substrates at elevations from 100 to 1,000 meters. I also mentioned that I photographed a similar plant along the **Pacific Crest Trail** northeast of Tehachapi. These few occurrences of *E. foliata* would seem to pose no invasive threat to the native flora. Indeed, I reported that the Erskine Creek plants could not be found when searched for them in 2023. Furthermore, to my knowledge, this was the first report of the species growing wild in North America.

My identification of *Ephedra foliata* was based on comparisons of images of the plant in the field to those shown on the **Flora of Qatar** website, the dried-pressed plant specimens that I collected compared to images of herbarium specimens on **SEINet**, and from review of the genus taxonomy, particularly for the North American species (Cutler 1939, Stevenson 1993, Villanueva-Almanza and Fonseca 2011). This included type specimens for *E. foliata*, which were collected in Iran. When the taxonomy of the genus has many interpretations of the species published over time, I find it necessary to review type specimens; *E. foliata* was first described by **C.A. Meyer** in 1846.

I also had mentioned another non-native, *Ephedra foeminea*, reported by **Ickert-Bond** in the 2012

Jepson Manual, and concluded upon review of the herbarium specimen (CCH2), it was not the same as that of the Erskine Creek plant.

The genus *Ephedra* is usually **dioecious**, meaning that the female and male cones ("flowers") occur on separate plants. However, *E. foliata* can be **monoecious**, as described by **Mary G. Thoday** (Sykes) and **Emily M. Berridge** in 1912: "In *E. fragilis* var. *campylopoda*" [synonym], the strobilus is bisexual, with male flowers in the axils of the lower pairs of fertile bracts and ovules in the axils of the uppermost pair. The latter, however, never reach full development."

I also presented images of a bisexual plant of *Ephedra* cf. *viridis* found in **Squirrel Valley**. Thus, when both sexes are found on the same plant, baby ephedras are easier to reproduce. This may suggest that long-distance dispersal is more likely to succeed; however, I would not go so far as to say that the berry-like fruits of *E. foliata* flew in the stomach of a bird from Iran to Erskine Creek.

In the January 2024 *Mimulus Memo* (endnote 3), I mentioned reports where *E. foliata* had been cultivated, because I didnot see specimens or images to support the determinations. Subsequently, I came across images on the website **"plantmaster"** of *Ephedra* plants incorrectly identified *E. californica* cultivated at the **UC Davis Arboretum**. The same image was found on **Wikimedia Commons** identified *Ephedra* sp. In tracing the history reported on Wikimedia Commons, the image has also been identified *E. distachya*, which is known from Portugal to Kazakhstan. This was the original identification given to the Santa Barbara County specimen re-identified *E. foeminea* in the *Jepson Manual*. Apparently, a later author for Wikimedia Commons changed the identification of the UC Davis plant *Ephedra* sp. Nevertheless, I recognize this to be *E. foliata* by the cones at ends of long curved branches and by the opposite branching perpendicular to the main stem. Since **San Marcos Growers** had once reported they obtained *E. foliata* from UC Davis Arboretum, this original identification would seem to have been correct.

Finally the occurrence of *E. foliata* along Erskine Creek perhaps could have been the result of a relatively short distance dispersal by birds from plants being grown in Santa Barbara for horticulture, or more likely from other plants cultivated in the Lake Isabella area for medicinal purposes. ✿

View of Lake Isabella from parking lot at Nuui Cunni Native American Cultural Center

Hosting Chapter Council Meeting Volunteers Needed!

June 7-9 (2024)

by Richard Spjut, Chapter Delegate

THIS YEAR OUR CHAPTER WILL BE HOSTING the Chapter Council meeting in the Kernville area. We anticipate up to 50 attendees.

~ Volunteers Needed ~

I am seeking volunteers to assist in the following activities:

- check-in, name tag distribution
- collecting/confirming payment from attendees
- leading field trips
- meeting room set-up including checking Internet and electronics connections
- providing a continental breakfast and drinks for the June 8th meeting

Delegates from all 36 chapters are expected to attend, but not all will attend in person; some will attend by Zoom only for the Saturday June 8 portion.

Please contact **Richard Spjut**
(richspjut@gmail.com)
if you are willing to help.

~ Pre-Registration ~

ALL who plan to attend, whether by Zoom or in-person, will have to **pre-register**. A pre-registration webpage will be set up on the Chapter Council website which will include:

- registration for delegates and other CNPS members attending
- activity and field-trip choices and sign-ups
- meal choices and costs
- lodging and campground suggestions
- information on local activities and places of interest

This will be sent out to the Chapter Delegates about six weeks before the meeting. We may need a web-site support for this activity.

~ Timeline ~

Delegates and other attendees are expected to arrive in the area on **Friday June 7**, checking into their lodging. Those attending field trips on that day may arrive earlier on Thursday, June 6. A tentative outline of activities by date follows:

Thursday, June 6? *(Tentative date and place)*
TIME (?) – SET-UP: Masonic Lodge, Kernville

- Two volunteers needed to arrange furniture, set up a screen monitor and check internet connection.

Friday, June 7
10:00 AM to 5:00 PM – FIELD TRIPS:

- Two volunteers needed to check for attendance and waiver signatures. Possibly meeting place – the **Nuui Cunni Native American Culture Center**.
- **Volunteers** needed to lead field trips

1:00-5:00 PM – BOARD OF DIRECTORS MEETING: Chamber of Commerce in **Kernville**.

5:30-9:00 PM – Happy Hour and **Dinner, Elks Lodge, Wofford Heights:**
All who register can attend this social gathering. Kern Chapter will pay for **happy hour** (beer, wine only) from **6:00-7:00 PM** and for a **buffet-style meal** to follow.

- **Two volunteers** are needed to check for attendance and pre-registration.

Saturday June 8
9:00 AM-5:00 PM –
CNPS Chapter Council Meeting, Masonic Lodge *(Tentative)*, **Kernville**

- **Two or more volunteers needed** to arrange for a continental breakfast for attendees at 8-9 AM and also to arrange for juice, coffee and/or tea to be available **all day**
- **Two volunteers** needed to check attendees in at outside table and make sure they find name tags and assure that attendees have made their meal choices and pre-paid

Sunday, June 9 – FIELD TRIPS
8:00 AM. Meet at the Nuui Cunni NativeAmerican Culture Center.

- **Volunteers** needed to lead field trips to Saddle Springs Road and Greenhorn Mountains near Shirley Meadows ✿

~ Previous Field Trip Photos ~

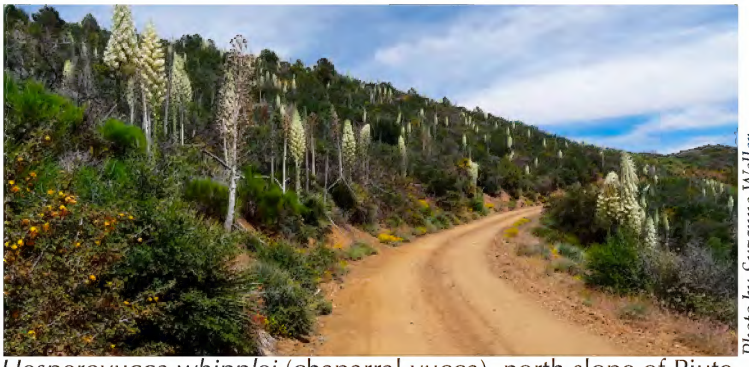

Photo by Suzanne Weller.

Hesperoyucca whipplei (chaparral yucca), north slope of Piute Mountain along **Saddle Springs Road**, a distinct vegetation type below the *Ceanothus vestitus* chaparral and above the Piute Cypress Woodland.

Photo by Richard Spiut

Phacelia exilis (Transverse Range Phacelia), above **Shirley Meadows** in mixed conifer forest, Greenhorn Range, a California rare species ranked 4.3.

SAVE THE DATE:

CNPS-SLO Workshop
Plant Identification in the Field

May 5, 2024
Johnson Ranch Open Space
San Luis Obispo

Plant Identification
In The Field: 2024
• Presented by CNPS-SLO
• Identify flowering plants using the Vascular Plants of SLO County
• Improve your plant keying skills
SAVE THE DATE!
Sunday, May 5, 2024
9:30 am – 2:00 pm
Johnson Ranch Open Space, San Luis Obispo
For more info: cnpsslo.org (All Calendar Events)

LOCAL BOTANISTS **KRISTEN NELSON** AND **Dena Grossenbacher** will lead a field workshop aimed at helping biologists improve their plant keying skills. We will use the meadows at Johnson Ranch Open Space as our classroom Participants will key plants in the field to family, genus and species using the new edition of the **Flora of San Luis Obispo County, California** (FSLOC), by **Dr. David Keil**. This is an intermediate-level workshop — working knowledge of plant terminology and dichotomous keys are pre-requisites. **Advance registration required**, **$35**, beginning in mid-March, at *http://cnpsslo.org*. Contact **Kristen Nelson** (*kmnelson.nativplants@gmail.com*) or **Dena Grossebacher** (*denagros@gmail.com*). ✿

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The **Kern Chapter of the California Native Plant Society** currently meets the **3rd Thursday of each month**. Chapter website: *kern.cnps.org*

The **California Native Plant Society** is a non-profit organization dedicated to the conservation of California native plants and their natural habitats, and to increasing the understanding, appreciation, and horticultural use of native plants.

CNPS has **31 chapters** throughout the state and membership is open to all persons – professional and amateur – with an interest in California's native plants. Members have diverse interests including natural history, botany, ecology, conservation, photography, drawing, hiking and gardening. As a Kern County resident, your membership includes **Flora Magazine**, a quarterly journal with interviews, conservation updates, gardening advice. **Artemesia**, CNPS's scientific journal and **The Mimulus Memo**, the Kern Chapter newsletter published four times a year in January, March, June and September.

Join CNPS or renew your membership online at *cnps.org* **Membership levels:** $25, $50, $120, $500 ($25 minimum)Go Perennial at $5/month

To **unsubscribe/subscribe** to Kern CNPS email communications members should select the "unsubscribe" link at the bottom of the email.

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California Native Plant Society
KERN CHAPTER

Mimulus Memo

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